

TABLE I.—Flood stages for the month of June, 1920—Continued.

River and station.	Flood stage.	Above flood stages—dates.		Crest.	
		From—	To—	Stage.	Date.
EAST GULF DRAINAGE.					
<i>Apalachicola:</i>	<i>Feet.</i>			<i>Feet.</i>	
River Junction, Fla.....	12	9	9	12.0	9
MISSISSIPPI DRAINAGE.					
<i>Kaskiminetas:</i>					
Saltsburg, Pa.....	8	17	18	10.5	17
<i>Tuscarawas:</i>					
Coshocton, Ohio.....	8	20	20	8.5	20
<i>Mississippi:</i>					
Arkansas City, Ark.....	42	(1)	13	54.0	3 11
Vicksburg, Miss.....	45	(1)	13	50.8	3 19-28
Donaldsonville, La.....	28	(1)	23	32.6	3 18, 19
New Orleans, La.....	18	(1)	22	20.4	3 23-25
<i>Illinois:</i>					3 17, 18
Henry, Ill.....	7	(1)	7	16.2	3 24
Havana, Ill.....	14	(1)	5	19.7	3 26-28
Beardstown, Ill.....	12	(1)	16	21.3	3 27
Pearl, Ill.....	12	(1)	11	19.1	3 27
<i>Missouri:</i>					
Running Water, S. Dak.....	16	24	24	16.0	24
<i>Grand:</i>					
Brunswick, Mo.....	10	(1)	1	13.1	3 22
Do.....	10	6	6	10.0	6
Do.....	10	9	9	10.3	9
Do.....	10	27	(2)	11.7	30
<i>Tallahatchie:</i>					
Swan Lake, Miss.....	25	(1)	22	29.1	3 3-7
<i>Red:</i>					
Alexandria, La.....	36	(1)	6	37.1	2, 3
<i>Ouachita:</i>					
Monroe, La.....	40	(1)	12	41.0	5
<i>Atchafalaya:</i>					
Simmesport, La.....	41.0	(1)	24	46.7	3 21, 22
Melville, La.....	37	(1)	27	42.5	3 24-28
<i>White:</i>					3 20-26
Georgetown, Ark.....	22	(1)	9	23.0	3 28
<i>Cache:</i>					
Patterson, Ark.....	9	(1)	9	10.2	3 18-20
WEST GULF DRAINAGE.					
<i>Trinity:</i>					
Dallas, Tex.....	25	20	26	32.1	21
Trinidad, Tex.....	28	28	(2)	29.4	29
Liberty, Tex.....	25	(1)	16	27.2	9-12
<i>Rio Grande:</i>					
San Marcial, N. Mex.....	14	(1)	4	16.1	3 27-4
<i>Colorado:</i>					
Topock, Ariz.....	14	(1)	20	24.4	2
Yuma, Ariz.....	25	(1)	22	30.5	8
<i>Grand:</i>					
State Bridge, Colo.....	9	(1)	21	11.4	1, 10, 11
Do.....	9	23	26	9.4	25
Do.....	9	28	(2)	9.2	29

¹ Continued from May. ² Continued into July. ³ April. ⁴ May.

TABLE I.—Flood stages for the month of June, 1920—Continued.

River and station.	Flood stage.	Above flood stages—dates.		Crest.	
		From—	To—	Stage.	Date.
WEST GULF DRAINAGE—continued.					
Grand—Continued.	Feet.			Feet.	
Grand Junction, Colo.....	11	(1)	3	11.4	2
Fruita, Colo.....	12	(1)	16	15.0	23
Eagle:					
Eagle, Colo.....	5	(1)	1	5.0	31, 1
Do.....	5	9	9	5.0	9
Gunnison:					
Sapinero, Colo.....	16	(1)	30	20.2	1
Do.....	16	20	20	16.0	20
Do.....	16	22	24	16.3	22
Do.....	16	26	(2)	16.5	28-29
Delta, Colo.....	9	(1)	11	10.3	22
North Fork Gunnison:					
Paonia, Colo.....	8	(1)	16	9.9	22
Green:					
Green River, Colo.....	9	(1)	3	9.8	1
Do.....	9	8	28	10.9	12
Elgin, Utah.....	13	(1)	5	14.0	3
San Juan:					
Farmington, N. Mex.....	8	28	28	8.0	28
PACIFIC DRAINAGE.					
Columbia:					
Marcus, Wash.....	24	18	(2)	26.6	26, 27
Vancouver, Wash.....	15	20	28	15.2	26, 27

¹ Continued from May. ² Continued into July. ³ April. ⁴ May.

MEAN LAKE LEVELS DURING JUNE, 1920.

By UNITED STATES LAKE SURVEY.

[Dated: Detroit, Mich., July 7, 1920.]

The following data are reported in the "Notice to Mariners" of the above date:

Data.	Lakes.*			
	Superior.	Michigan and Huron.	Erie.	Ontario.
Mean level during June, 1920:	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>	<i>Feet.</i>
Above mean sea level at New York.....	602.75	580.86	572.49	245.56
Above or below—				
Mean stage of May, 1920.....	+0.35	+0.13	+0.18	-0.04
Mean stage of June, 1919.....	+0.31	-0.62	-1.28	-2.39
Average stage for June, last 10 years.....	+0.49	0.00	-0.42	-1.37
Highest recorded June stage.....	-0.68	-2.74	-2.03	-3.07
Lowest recorded June stage.....	+1.51	+0.96	+0.92	+0.67
Average relation of the June level to:				
May level.....	+0.30	+0.20	+0.20	+0.20
July level.....	-0.10	+0.10	+0.10	+0.10

*Lake St. Clair's level: In June, 575.42 feet.

EFFECT OF WEATHER ON CROPS AND FARMING OPERATIONS, JUNE, 1920.

By J. WARREN SMITH, Meteorologist in Charge.

The weather during June was, on the whole, very favorable for farming operations and the development of vegetation in nearly all sections of the country. Rainfall occurred mostly in the form of local showers, was fairly well distributed through the month, and the monthly totals were moderate in most districts east of the Rocky Mountains, except that they were large in the central Gulf area, some north-central border States and locally in the Northeast; the June temperatures averaged generally near the normal in all sections of the country. These conditions permitted rapid progress in seasonal farm operations; good cultivation of row crops was accomplished while generally favorable weather the latter part of the month permitted rapid progress in harvesting winter wheat in the central and southern portions of the belt.

The first week of the month was generally too cool for corn in most central and northern districts and there was some further delay in planting in some interior localities on account of wet soil, but thereafter the weather was more favorable, especially the higher temperatures and more sunshine, and corn made mostly satisfactory advance. Much better weather prevailed during June than during the preceding month throughout the cotton belt, with resulting steady, and in some cases rather pronounced, improvement in the cotton crop. The im-

provement continued throughout the month and was such as to bring the condition of the crop up to nearly an average for the season in some States, particularly in South Carolina, Louisiana, and Oklahoma, but in the southeastern portion of the belt the crop was still in rather poor condition, especially in Alabama, Mississippi, and Georgia.

Both winter and spring wheat made satisfactory development during the month, spring wheat especially showing steady, and in some cases substantial, improvement, and at the close of the month this crop was considerably better than the average, although too much moisture somewhat unfavorably affected it in some of the eastern districts of the belt, particularly in Minnesota. Oats, barley, and other small grains made satisfactory advancement quite generally.

Potatoes and truck crops did well as a rule, although there was some frost damage in the far Northwest during the last decade of the month, and there was too much moisture in some north-central districts, while it was rather cool for best results in some central sections during part of the month. Meadows, pastures, and stock continued in satisfactory condition throughout the month and at its close stock were reported to be in good to excellent condition in all the range States; the cutting of alfalfa and other hay and forage crops progressed well.